



Food Protection and Defense Institute

A Homeland Security Center of Excellence

April 22, 2020

COVID-19 Near-Term Issues Spotting in Food Supply Chain

Pork Supply Chain and Mass Depopulation

Action Opportunity

Prepare to assist pork producers in disposal of large quantities of market weight hogs in coordination with USDA ([Carcass Management Dashboard](#)) because mass destruction of market weight hogs is imminent

Background Context

The African Swine Fever (ASF) outbreak in China in 2018-19 resulted in a loss of approximately 55% of the Chinese swine herd which is about a 44% decrease in Chinese pork production. This decrease is more than the amount of pork produced by US, Brazil, Mexico, Canada, Germany, and Poland combined. The ASF outbreak in China resulted in a net decrease of approximately 7% of the total global meat supply (all species) and about 20% of the total global pork supply. As result of these net decreases, US pork producers accelerated production. By the end of 2019, pork exports had surged leading while pork production was near capacity and active expansion of capacity was underway. Total production capacity in the US was expected to be reached by mid-2020.

Pork processing facilities capacity was estimated at approximately 500,000 head per day across the US with capacity centered in the Upper Midwest and North Carolina in mid-April 2020. As of April 21, 2020, it is reported that about 20-25% of the pork processing capacity has been lost in the Upper Midwest (MN, IA, SD) due to plant closures or slowdowns related to COVID infections. This means that approximately 100,000 market weight hogs per day currently do not have a facility capable of processing them and will need options for disposal. Given the near capacity situation across the market, flexibility to ship to an alternate processing facility is limited. In addition, North Carolina reported on April 22, 2020 that coronavirus is beginning to affect its pork processing capacity with COVID infections at five hog and poultry processing plants. These processing facilities are not yet closed, but the possibility exists that the pork supply chain disruption seen in the Upper Midwest will also occur in the coming weeks in NC.



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Pork producers are attempting a variety of interventions to slow the growth of their animals to avoid depopulation of market weight hogs. However, with the quantity of animals reaching market weight each day and the high likelihood that additional processing facilities will temporarily or indefinitely close for worker health reasons, it is near certain that mass depopulation of swine herds will be required.

In addition, pork producers are also aggressively culling younger animals to slow overall production. Disposal capacity for these pigs should also be considered. Regaining production when young animals are culled will extend recovery time for the supply chain when processing facilities reopen potentially resulting in longer term tight pork supplies at retail.

This near-term issues spotting report focuses on pork production; however, it is important to note that similar issues with capacity exist in poultry and beef processing. Poultry producers are also depopulating barns and destroying eggs to throttle production. Beef producers have slightly more flexibility with the slower growth rate of their animals and the ability to keep young stock on pasture for extended periods of time.

Supporting Documentation

African Swine Fever Chinese pork production impact statistics. Private sector confidential. 2019. (Note the estimates provided are higher than official Chinese statistics and were gathered by a private sector US partner with numerous assets in China)

Daily Livestock Report. CME Group. April 13, 2020.

[Coronavirus at meat packing plants worse than first thought, USA TODAY investigation finds.](#) USA Today. April 22, 2020.

['Horrible choices': Iowa livestock producers may have to euthanize pigs as packing plants struggle.](#) Des Moines Register. April 22, 2020.

[Coronavirus invading N.C. meat processing plants.](#) North Carolina Health News. April 22, 2020.